

Amendments to the Specification:

Please replace paragraph [0001] with the following paragraph:

[0001] This application is a continuation of co-pending prior application serial no. 10/002,032, now U.S. Patent No. 6,623,066, which is a continuation-in-part of co-pending prior application serial no. 09/897,762, filed July 2, 2001, now U.S. Patent No. 6,644,719, which is a continuation of co-pending prior application serial no. 09/296,357, filed April 22, 1999, now U.S. Patent No. 6,254,171. Application serial nos. 10/002,032, 09/897,762 and 09/296,357 are hereby incorporated by reference.

Please replace paragraph [0003] with the following paragraph:

[0003] Recreation vehicles including motor homes, fifth wheel trailers and travel trailers may be provided with an extendable slideout unit for increasing the vehicle's living space. This slideout unit may be extended for use when the vehicle is parked ~~and~~ and is retracted in a telescoping manner when the vehicle is to be moved.

Pages 2 to 4, please cancel the entire section SUMMARY AND OBJECTS OF THE INVENTION, including the section title. This includes paragraphs [0009] through [0016]

Page 2, after paragraph [0008], please insert the following 7 new paragraphs including the following section title:

SUMMARY OF THE INVENTION

[0008.1] In one aspect of the present invention, this is accomplished by providing a slidable room comprising: two jambs, adapted to be attached to a vehicle about an opening in the vehicle, each jamb having: a plurality of pulleys thereon; and a drive cable therein, the drive cable comprising a central section, an interconnecting section extending from each end of the central section; and a plurality of room engaging sections extending from a free end of each

interconnecting section, a free end of each room engaging section extending around at least one pulley and through the jamb, the central section and at least a portion of the interconnecting sections extending beyond an end of the jamb; a room, the room being adapted to be inserted into the vehicle opening and between the jambs, the free end of the drive cable room engaging sections being attached to the room; and a motor, the central section of the drive cable being operatively attached to the motor.

[0008.2] In another aspect of the present invention, this is accomplished by providing a slidable room comprising: two jambs, adapted to be attached to a vehicle about an opening in the vehicle, each jamb having: a plurality of pulleys thereon; and a plurality of cables therein, drive ends of the cables extending beyond an end of the jamb, room ends of the cables extending through the jamb; a room, the room being adapted to be inserted into the vehicle opening and between the jambs, the room ends of the cables being attached to the room; and a motor, the drive ends of the cables being operatively attached to the motor.

[0008.3] In another aspect of the present invention, this is accomplished by providing a jamb for attachment to a vehicle and for use with a slidable room adapted to be installed in an opening in the vehicle, the jamb comprising: an elongated jamb member adapted for attachment to the vehicle adjacent the vehicle opening; a plurality of pulleys rotatably attached to the elongated jamb member; and a drive cable within the elongated jamb member, the drive cable comprising a central section, an interconnecting section extending from each end of the central section; and two room engaging sections extending from a free end of each interconnecting section, a free end of each room engaging section extending around at least one pulley and through the jamb, the central section and at least a portion of the interconnecting sections extending beyond an end of the jamb.

[0008.4] In another aspect of the present invention, this is accomplished by providing a vehicle comprising: at least one wall having an opening therein; two jambs, each jamb having: a plurality of pulleys thereon; and a drive cable therein, the drive cable comprising a central section, an interconnecting section extending from each end of the central section; and a plurality of room engaging sections extending from a free end of each interconnecting section, a free end of each room engaging section extending around at least one pulley and through the jamb, the central section and at least a portion of the interconnecting sections extending beyond an end of the jamb, the jambs being attached about the opening of the at least one wall; a room inserted into

the opening of the at least one wall and between the jambs, the room being reciprocable between an extended position and a retracted position, the free ends of the drive cable room engaging sections being attached to the room; and a motor attached to the at least one wall, the drive cable central sections being operatively attached to the motor.

[0008.5] In another aspect of the present invention, this is accomplished by providing a drive mechanism for a slidable room in a vehicle comprising: a pair of cables, each cable having a center section having two ends; and a pair of end sections attached to each center section end, each cable thereby having a double “Y”-shape.

[0008.6] In another aspect of the present invention, this is accomplished by providing a drive mechanism for a slidable room in a vehicle comprising: a pair of cables, each cable having a center section having two ends, a central portion of the center section being chain; and a pair of end sections attached to each center section end, each cable thereby having a double “Y”-shape, one end section of the pair of end sections being longer than the other end section of the pair of end sections.

[0008.7] The foregoing and other aspects will become apparent from the following detailed description of the invention when considered in conjunction with the accompanying drawing figures.

Please replace paragraph **[0036]** with the following paragraph:

[0036] Referring now to FIGS. 1 through 3, the present invention ~~in its preferred embodiments~~ relates to a vehicle 20 comprising a vehicle body 22 (or base unit or first module) having one or more room slideout units (or second modules) 24 that is horizontally reciprocable relative to the vehicle body 22 between a retracted (or first) position shown in FIG. 1 and an extended (or second) position shown in FIGS. 2 and 3. The vehicle 20 can be a motor home, a fifth wheel trailer or a travel trailer. The slideout unit 24, when extended, affords more room or space to the interior of the vehicle. A novel actuation system or drive mechanism (or force transmitting mechanism), to be described later is provided for reciprocation of the slideout unit 24. This first slideout unit (room slideout unit or space-expanding slideout unit) 24, and the drive mechanism for reciprocating the slideout unit 24, together form a slidable room assembly.

Please replace paragraphs [0040] through [0042] with the following paragraphs:

[0040] In any case, a vehicle 20 according to this invention comprises a vehicle body 22 having a plurality of exterior walls, e.g., a roof, a front wall, side walls, and a rear wall. The interior of vehicle body 22 ~~at~~ also has a floor. Beneath the floor is an underframe (not shown) for supporting the vehicle body 22; the underframe may be conventional. At least one of the exterior walls, here shown as the left side wall 30, has an opening 32 therein for receiving the first reciprocable slideout unit 24. The opening 32 in the left side 30 of vehicle body 22 is preferably rectangular, as shown, and has a perimeter that includes horizontal top and bottom edges and vertical side edges. A fixed frame member 34, which may be metallic or rigid composite in its preferred form, encircles the perimeter of the opening 32. Each of the side walls 30 (only the left side wall is shown) has a lower portion or skirt 36, which is disposed below the floor of vehicle 20 and which terminates in a lower edge 37. One or both side walls 30 may have an opening 38, which is preferably rectangular, for receiving storage slideout unit 26. There may be any number of such openings 38 equal to the number of storage slideout ~~a its~~ units 26. These openings 38 may be in any location. Opening 38 preferably extends to ~~the~~ the lower edge 37 of the side wall 30.

[0041] Both slideout units ~~[[2]]~~ 24 and 26 should always be retracted, as shown in FIG. 1, when the vehicle is in motion. When the vehicle is parked or stationary, the room slideout unit 24 may be slid to the extended position shown in FIGS. 2 and 3, to afford additional room in the interior of the vehicle. Similarly the storage slideout unit 26 may be opened (i.e., moved to extended position) when the vehicle is at rest.

[0042] The room slideout unit 24 has the same cross-sectional shape as the opening 32 in the vehicle body 22, i.e., rectangular in the preferred embodiment shown. The ~~slide-out~~ slideout unit 24 may comprise a floor 40, a ceiling 42, left and right side walls 44 and 46, respectively (as seen from the interior of vehicle 20 looking out), and a forward or outside wall 48. The forward or outside wall 48 of the slideout unit 24 is substantially coincident with (and spaced slightly outwardly from) the left side wall 30 of the vehicle body 22 when the slideout unit 24 is retracted (FIG. 1), and is parallel to and spaced outwardly from the vehicle body side wall 30 when the slideout unit 24 is extended (FIG. 2). As described, the left side wall 44 of the slideout unit 24 is disposed in a rearward direction of the vehicle body 22, and the right side wall 46 of the slideout

unit 24 is disposed in a forward direction of the vehicle body. The spacing between opposite side walls 44 and 46 (which are respective left and right hand walls) is just slightly less than the width of the opening 32 in the vehicle body 22, to afford enough clearance for sliding movement of the slideout unit 24 while minimizing the intrusion of the elements such as wind and rain. The size of the forward or outer wall 48 can be just slightly greater than the size of the vehicle body opening 32. In this manner, the edges of the forward wall 48 overlie the fixed frame member 34 on the vehicle body 22 as an aid in maintaining a good seal when the slideout unit is retracted. Seals (not shown) extending around the perimeter of opening 22 may be provided.

Please replace paragraphs [0045] and [0046] with the following paragraphs:

[0045] Either one or more than one space-expanding slideout ~~unit~~units 24 may be provided in a vehicle 20 in accordance with this invention. A horizontally reciprocable room slideout unit 24 may be provided in any of the exterior walls of vehicle 20, e.g., the left side wall 30 as shown, the right side wall, and/or the rear wall of vehicle 20. Two room slideout units 24, one on each side of the vehicle may be provided. Also in accordance with this invention, one may provide a vertically reciprocable slideout unit in order to expand interior space in a vertical direction. The drive mechanism in all cases may be as described in FIGS. 4, 5~~[[,]]~~ and 13 and through 14.

[0046] FIGS. 4 and 5 show various force transmission mechanisms (or drive ~~mechanisms~~mechanisms) in accordance with a first embodiment of this invention for transferring force or power from a power input source to a slideout unit. The power input source may be either manual or motorized, as will be illustrated hereinafter. In all embodiments, force is transmitted evenly to upper and lower portions and to both sides of the slideout unit, resulting in smooth, even application of force, so that the slideout unit reciprocates smoothly along its predetermined axis and in a predetermined plane, with no tendency to twist or bind, and with minimum power input required, considering the appreciable weight of a typical slideout unit for a vehicle.

Please replace paragraph [0050] through [0052] with the following paragraphs:

[0050] Sprocket 70 may be located in a lower portion of slideout unit 24, just above the floor 40 and just behind the forward or outside wall 48 of the slideout unit, as best seen in FIGS. 7 and 9. Sprocket 70 is mounted on a shaft 72 for rotation therewith, which may be a drive shaft. Shaft 72 extends along a center axis Y (see FIG. 4) of slideout unit 24, midway between side walls 44 and 46. Shaft 72 may be a drive shaft of an electric motor 73, which (when present) may be mounted just above floor 70 of the slideout unit 24, close to outside wall 48. Alternatively, a portable motor (which is connected to drive shaft 72 only when the slideout unit 24 is to be moved), a hand crank (which may be connected to drive shaft 72), or manual power (applied through handles 50) may be used instead of electric motor 73. Whatever form of power input is used, it is advisable to lock the slideout unit in place when it is not in motion. A worm drive is one means (and a preferred means) for accomplishing this. The worm drive performs a locking function when the slideout unit 24 is at rest, locking the slideout unit 24 in place (in the closed position when fully retracted, for example), so that lock 52 is not necessary. With other drive mechanisms, locking means (e.g., a cam lock, or clamp in the walls of slideout unit 24) must be used to retain the slideout unit 24 in position.

[0051] A plurality of anchors 80 are provided for securing the cable drive members 62, 64 to fixed frame member 34 of vehicle body 22. Four anchors 80, 80a, 80b, and 80c, i.e., two anchors for each cable drive member 62, 64, are highly preferred. These anchors 80 are mounted on fixed frame 34 (see FIG. 8) and clamp the cable drive members 62, 64, at spaced points as shown in FIGS. 4 and 5. When, four anchors 80, 80a, 80b and 80c are used, two anchors 80 and 80b are disposed in vertically spaced relationship on one side of room slideout unit 24, and the other two anchors 80a and 80c are disposed in vertically spaced relationship on the other side of room slideout unit 24, as may be seen in FIGS. 4 through 6. Two anchors 80, 80a are disposed in an upper portion of room slideout unit, above the center of mass CM (see FIG. 6) and the other two anchors 80b, 80c ~~are~~ are disposed in a lower portion of room slideout unit 24, below the center of mass CM.

[0052] The reason why at least four anchors 80 are highly preferred may be seen with reference to FIG. 6. If one uses four anchors 80, 80a, 80b and 80c as shown in FIGS. 4 through 6, i.e., two anchors 80, 80a in an upper portion of slideout unit 24, above the center of mass CM thereof, and the other two anchors 80b, 80c in a lower portion of slideout unit 24, below the center of mass CM, force is applied evenly to the slideout unit 24 so that the slideout unit 24

slides smoothly in a predetermined path along its axis of reciprocation Y. This places minimal stress on the guide means (discussed subsequently) for guiding the slideout unit 24. The slideout unit 24 is pulled as it slides. This requires a sturdier guide system, one that will support as well as guide slideout unit 24, than is necessary when four anchors are used. More than four anchors can be used, but this requires a more complex drive mechanism without ~~comments on~~ the commensurate benefit. The benefits of this invention are best obtained with four anchors arranged as described above.

Please replace paragraph [0057] through [0061] with the following paragraphs:

[0057] The first set 102 of sheaves 100 comprises four pairs A, B, C and D of sheaves, and a fifth sheave E, which is a single sheave. The sheaves 100 forming the first pair A have a common longitudinal axis (i.e., an axis that is parallel to the center axis Y and to the side walls 44 and 46 of the slideout unit 24). Each of the pairs B, C and D comprises two sheaves having a common transverse axis (i.e., an axis that is perpendicular to the center axis Y and parallel to the forward or outside wall 48 of the slideout unit). Sheave E also has a transverse axis. The sheaves 100 forming each pair A, B, C and D are freely rotatable on their respective shafts and freely rotatable with respect to each other. All sheaves 100 rotate only when slideout unit 24 is being moved and are stationary at other times. The two ~~shaves~~ sheaves 100 of each pair rotate in opposite directions during movement of slideout unit 24, as will be hereinafter explained.

[0058] The first pair A of the first set 102 of sheaves 100 is located in a lower corner of the slideout unit 24, near the intersection of the slideout unit's floor 40, forward wall 48 and left side wall 44 (that is a rearward side wall relative to vehicle body 22 in the embodiment shown, wherein the slideout unit 24 is on the left side of the vehicle 20). The second pair B and third pair C of sheaves 100 are located near the slideout unit's ceiling ~~[[422]]~~42, and near the forward and rearward ends, respectively, of the slideout unit 24. The fourth pair D of sheaves 100 and the fifth sheave E are preferably located below the floor 40 of the slideout unit 24, along the left side 44 of the unit 24 and near the rearward and forward ends, respectively, of the slideout unit. Similarly, sheaves A' through E' or the second set 104 are located in corresponding ~~position~~ positions adjacent to the right side wall 46 of slideout unit 24. The positions of the sheaves 100

in both sets 102 and 104 are shown diagrammatically in FIG. 4, and the positions of the sheaves in the second set 104 may also be seen pictorially in FIG. 7.

[0059] The first set 102 of sheaves 100, together with sprocket 70, collectively define a path for the first cable 62. This path comprises a plurality of courses, a through j, each course being defined as a segment of the cable 62 between the sprocket 70 and the first sheave, and between each pair of successive sheaves in the drive train. Starting at the sprocket 70, a first outbound course a extends transversely from the sprocket 70 to one of the first pair A of sheaves 100. Successive outbound courses b, c, d, and ~~[[a]]~~e extend ~~From~~from the first pair A of sheaves 100 to the fifth and last sheave E, as shown in FIG. 4. Courses b through ~~[[a]]~~e are disposed alongside the left side 44 of the slideout unit 24. At the fifth and last wheel E, the first cable 62 reverses direction, and the return path comprises a plurality of courses f through i, from the fifth sheave E through the first pair A of sheaves, alongside the left side 44 of the slideout unit 24. Courses b through i (those disposed along the left side 44 of slideout unit 24) collectively form a first set of courses. Finally, a return course j extending from the first pair of sheaves 100 transversely back to the sprocket 70 completes the closed loop through which the first cable 62 moves.

[0060] Similarly, a second set 104 of sheaves 100, comprising a first pair A' of sheaves 100 having a longitudinal axis (at the lower right forward corner of the slideout unit 24) second through fourth pairs (B', C' and D') of sheaves 100, and a fifth sheave E', each having a transverse axis, and, together with the sprocket 70, define a path for the second cable 64. This path is a mirror image of the path for the first cable 62 and comprises courses a' through j'. Courses b' through i' are parallel and adjacent to the right side wall 46 of slideout unit 24 and form a second set of courses. Those courses a, a', j and j', which are parallel to the forward or outside wall 48 of slideout unit 24 (and are therefore perpendicular to side walls 44 and 46) form a third set of courses. All of the sheaves 100 in the second set 104 are located near the right hand (or forward) wall 46 of the slideout unit 24.

[0061] Sheaves 100 may be rotatably mounted on shafts, which in turn are fixedly secured to a slideout unit frame 110, as shown in ~~FIG~~FIG. 8. The slideout unit frame 110 may include a pair of L-shaped frame members 112, which are affixed to the floor 40 of slideout unit 24 and which extend close to respective slideout unit side walls 44 and 46 from a forward end to a rearward end of the slideout unit 24, (i.e., longitudinally or parallel to axis of reciprocation Y),

and a pair of longitudinally extending channels that are affixed to respective L-shaped frame members 112. As a result, the axes of all of the sheaves 100 will reciprocate with slideout unit 24, and the sheaves 100 themselves will both reciprocate and rotate (as a result of cables 62 and 64 passing over the sheaves 100) as the slideout unit 24 is reciprocated.

Please replace paragraph [0069] with the following paragraph:

[0069] When a slideout unit 24 of a vehicle is in a first or retracted position, as shown in FIG. 1, drive mechanism 60 is in a first position, as shown in FIG. 4. The chain portion 68 of each cable 62 and 64 makes a one-half turn around sprocket 70, with most of the remaining length of the chain portion disposed on a return course j or j', with only a very small part of each chain 68 disposed along an outbound course a or a' of cable 62 or 64. Anchors 80 are disposed along respective courses c, c', f and f, at distances from respective sheave pairs C, C', D and D' that exceed the amplitude of reciprocatory movement of slideout unit 24.

Please replace paragraph [0074] with the following paragraph:

[0074] When the location of all sheave pairs or subsets is reversed from forward to rearward portion of the slideout unit 24, sheave pair A and A' are disposed near a rearward end of the slideout unit, and sheave pairs B and B' and sheaves E and ~~Pair E'~~ are similarly disposed toward a rearward end. Sheave pairs C and C', and D and D' would then be located near a forward end of the slideout unit.

Please replace paragraph [0076] and [0077] with the following paragraphs:

[0076] Instead of continuous or endless cable drive members as shown, one can use "straight" cables or other drive members, i.e., drive members that have ends. Referring now to FIGS. 4 and 5, cable 62 can terminate at anchors 80 and 80b, eliminating courses d and c. Similarly, cable 64 can terminate at anchors 80a and 80c. The anchors then become end anchors, which may be of one of the structures shown or of other structures. Suitable structures are known

in the art. Four points of attachment (at 80, ~~[[8081]]~~80a, 80b and 80c) are essential in this modification.

[0077] The drive mechanism is shown as being mounted on the slideout unit in each of the embodiments illustrated. However, if desired, this mechanism, including the sprocket 70 (where applicable) ~~or spool 170 (where applicable)~~ and the sheaves 100 (in all embodiments) may be mounted on fixed frame members that form part of the vehicle body 22 (or first module). In that case, the anchors 80 would be mounted on frame members associated with the slideout unit 24 (or second module).

Please replace paragraph [0081] with the following paragraph:

[0081] FIGS. 13B and 13C illustrate ~~[[the.]]~~the right and left sides of the drive mechanism shown in FIG. 13. Drive cable 404 includes a central section that has a chain or other sprocket engaging section 404a. Preferably, drive cables 404 non-slippingly engage sprocket 70 to keep the two drive cables 404 synchronized. Without this synchronization, it would be possible for one side of slideout 24 to move faster or further than the other side. This could result in the slideout 24 becoming cocked or canted in the opening 32 and possibly becoming jammed in place. The main section of the drive cable 404 consists of the chain 404a and two drive sections 1, 3. Each drive section 1 ultimately connects, via end sections 2, 2a, to the outside corners of the slideout unit 24 and each drive section 3 ultimately connects, via end sections 4, 4a, to the inside corners of the slideout unit 24.